

explicitly select particular changes to the search as demonstrative of these desires and characteristics. These changes are generally to be applied to the original search formulation, i.e., at the level of input translation to explicit search formulation. However, where the system which formulates the search strategy is not adaptive, these adaptive features may be incorporated into the interface system according to the present invention. In this case, the present system acts as a post-translator to apply modifications to a search from the initial translator and before presentation to the user. This two-step process has the advantage of allowing the user to return to the default search strategy from the initial translator without exiting the graphic search formulation system according to the present invention.

While the above detailed description has shown, described and pointed out the fundamental novel features of the invention as applied to various embodiments, it will be understood that various omissions and substitutions and changes in the form and details of the system and method illustrated may be made by those skilled in the art, without departing from the spirit of the invention. Consequently, the full scope of the invention should be ascertained by the appended claims.

What I claim is:

1. A graphic user interface method for defining database query definition and output representation operation parameters of a database, comprising the steps of:

graphically representing a query definition or output representation operation on the data set, said graphic representation having a graded representation portion; receiving from the user a manipulation of the grade of graded representation portion; and

translating the manipulation of the graded representation into a database query definition or output representation operation parameter for the database receiving the output database set in accordance with the database query definition of output representation operation parameter.

2. The method according to claim 1, wherein said data set comprises free form text.

3. The method according to claim 1, wherein said database operation parameters comprise Boolean search parameters.

4. The method according to claim 1, wherein said graphic representation comprises a bulls'-eye.

5. The method according to claim 1, wherein said graphic representation comprises a pyramid.

6. The method according to claim 1, wherein said manipulation comprises a gesture.

7. The method according to claim 1, wherein said manipulation comprises selecting a start position within the graded representation portion and subsequently displacing a graphic cursor with respect thereto.

8. The method according to claim 1, wherein said database operation parameters comprise at least one numerical operator defining an expansiveness of a set inclusion property.

9. The method according to claim 1, wherein said database operation parameter comprises a statistical parameter.

10. The method according to claim 1, wherein said database operation parameter modifies a presentation of results of a Boolean search expression.

11. The method according to claim 1, wherein said database operation parameter modifies a set inclusion property of a Boolean search expression.

12. The method according to claim 1, wherein said database operation parameter comprises a non-Boolean search parameter.

13. The method according to claim 1, wherein the user manipulation comprises a gesture for affecting a relative size, shape or position of the graded representation portion.

14. The method according to claim 1, wherein the database operation parameter comprises an output ranking.

15. The method according to claim 1, further comprising the steps of receiving a further database operation parameter from the user, the database operation parameter and further database operation parameter being selected from one or more of the group consisting of a set inclusion property and a set ranking property.

16. The method according to claim 1, wherein a set inclusion criterion resulting from evaluation of the database operation parameter is based on an intrinsic characteristic of the elements of the database, and a ranking included elements in an output set is based on a characteristic extrinsic to the elements of the database.

17. The method according to claim 1, further comprising the steps of:

evaluating the database operation parameter to produce an output set;

representing the output database set as a second graphic representation having a graded representation portion; receiving from the user a manipulation of a graded of the graded representation portion of the second graphic representation; and

translating the manipulation of the graded representation of the second graphic representation into a second database operation parameter for the output set.

18. The method according to claim 1, wherein said graphically representing step is adaptive to a style of the user.

19. The method according to claim 1, further comprising the step of altering the functioning of the graphic user interface based on preferences of the user, the preference being derived from monitoring the past activities of the user.

20. The method according to claim 1, further comprising the step of transmitting the database operation parameter through a computer network to a remote database server.

21. The method according to claim 1, wherein:

said graded representation portion comprises at least one graphic control having a liner depiction; and

said manipulation comprises a movement of a graphic element along the liner depiction.

22. The method according to claim 1, wherein:

said graded representation portion comprises a plurality of graphic controls, arranged in an array and each having a liner depiction; and

said manipulation comprises a movement of a graphic element along the liner depictions.

23. The method according to claim 1, wherein the database contains a set of referential data records, each having an identifier, and information relating to the content of the database and identifiers of a subset of the referential data records, further comprising the steps of sorting identifiers of the subset based on a primary search criterion and an analysis of a relation of references of the database.

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